DOCUMENT RESUME

ED 409 258 SO 028 347

AUTHOR Watt, Michael G.

TITLE National Curriculum Collaboration: The State of Reform in

the States and Territories.

PUB DATE Jul 1997

NOTE 34p.; Paper presented at the Biannual Meeting of the

Australian Curriculum Studies Association (Sydney, New South

Wales, Australia, 10-13 July, 1997).

PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS *Academic Standards; Curriculum Design; *Curriculum

Development; Educational Change; *Educational Cooperation; Educational Legislation; Educational Planning; *Educational Policy; Educational Quality; Elementary Secondary Education; Foreign Countries; *National Programs; *State Standards;

Student Evaluation

IDENTIFIERS *Australia

ABSTRACT

Between 1986 and 1993 Australia developed a national curriculum framework of statements and profiles in eight learning areas. These areas were (1) English, (2) mathematics, (3) science, (4) studies of society and the environment, (5) arts, (6) health and physical education, (7) technology, and (8) languages other than English. This development represented the most significant curriculum reform ever attempted in Australian education. Previous studies have examined the effects of the contrasting doctrines of corporate federalism and economic reform with the states' rights' position adopted by the states and territories. This article explores how antecedent conditions for curriculum development have influenced the process of implementing the national statements and profiles in the states and territories between 1993 and 1997. The states and territories examined are Queensland, New South Wales, Victoria, South Australia, Western Australia, Tasmania, Australian Capital Territory, and the Northern Territory. The national curriculum reform movement was based on assumptions and goals driving the broader agenda for educational reform during the 1980s. The individual states and territories, however, had already begun their own curricular reforms by the time the national agenda began implementation in the 1990s. The level of success and implementation of the national curriculum has been significantly affected by the success, degree of political support, and level of implementation of the individual efforts in each state and territory. (MJP)

Reproductions supplied by EDRS are the best that can be made

* from the original document. *



National Curriculum Collaboration: The State of Reform in the States and Territories

Michael G. Watt

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

 Minor changes have been made to improve reproduction quality.

 Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Paper presented at the Conference of the Australian Curriculum Studies Association, University of Sydney, Sydney, New South Wales, Australia, 10 to 13 July, 1997.

BEST COPY AVAILABLE



National Curriculum Collaboration: The State of Reform in the States and Territories

Abstract

This article examines how antecedent conditions for curriculum development have influenced the alignment between curricula and assessment systems at the state level and the national statements and profiles, since their referral to the Australian states and territories in 1993. The article concludes by assessing the importance of antecedent conditions as contributing factors in explaining the pattern of implementation.

Introduction

Representing the most significant curriculum reform in Australian education, the development of the national curriculum framework of statements and profiles in eight learning areas between 1986 and 1993 was based on assumptions and goals driving the broader agenda for educational reform during the 1980s. Interpretations of policy-making involved in national curriculum collaboration of this period have contrasted the doctrine of corporate federalism, initiated by the federal Labor government to promote economic reform in the 1980s, with the states' rights' position adopted by the states and territories (Bartlett, 1992; Bartlett et al., 1994; Lingard et al., 1995). The predominance of the federal government's agenda until 1993, led to the ascendancy of a corporate approach to managing the curriculum, which Marsh (1994) asserted was characterised by the authority innovation decision-making model of curriculum change, whereby superordinate groups, interacting through complex hierarchical relationships, made the key decisions, which were carried out by subordinate groups, excluded from the decision-making process. Failure to consult the wider educational community characterised the debate concerning incorporation of an outcome-



based education approach as a significant assumption underlying national curriculum reform, an emphasis which perturbed mathematics educators. Ellerton and Clements (1994) argued that its application to develop the Mathematics profile led to an instrument deficient in measuring student progress, a view supported by most professional associations of mathematics educators.

Whilst these views of national curriculum collaboration reflect significant opinions expressed by leading commentators on curriculum issues in the Australian national context, critical examination of the implementation of the national statements and profiles at the state level has been limited. In July 1993, the Australian Education Council (AEC) and the Ministers for Vocational Education, Employment and Training (MOVEET) convened a meeting in Perth, Western Australia, to review the recently completed national statements and profiles. At a prior meeting, the ministers from the non-Labor states and territories of New South Wales, Victoria, Western Australia, Tasmania, and Northern Territory, who commanded a 5 to 4 majority, agreed to block their adoption. This action forced a decision from AEC to refer them back to the states and territories for further review, involving consultation with their own educational communities to determine whether they should be adopted. At the next meeting in December 1993, AEC and MOVEET commissioned the Curriculum Corporation to identify approaches being taken by the states and territories to implement the national statements and profiles, which led to surveys being conducted in 1994, 1995, and 1996 to collect appropriate information from state and territory education agencies (McLean and Wilson, 1995). From an analysis of the processes identified through these surveys, Kennedy et al. (1996) concluded that political exigencies were responsible for the variance in the patterns of implementation, ranging from complete adoption in some states and territories to rejection in New South Wales.

In this article, the author examines how antecedent conditions for curriculum development have influenced the process of implementing the national statements and profiles in the states and territories between 1993 and 1997. Its purpose is to determine whether the nature of these conditions provides an explanation for the subsequent degree of alignment attained between existing curricula and assessment systems and the national statements and profiles. The article concludes by



attempting to assess the importance of antecedent conditions as contributing factors for explaining the pattern of implementation in each of the states and territories.

Implementation Process in the States and Territories

New South Wales

A period of educational reform was initiated in New South Wales by the release of three reports in 1989. The review of management aspects of the Education and Youth Affairs Portfolio, conducted by Dr Brian Scott, recommended in the report published by the New South Wales Education Portfolio (1989), reducing the roles of the central executive to policy, managerial and planning activities, decentralising professional support and administrative activities to ten regional offices, establishing forty education resource centres, and handing schools responsibility for budgets and selection of school staffs. The report of the fourteen-member Committee of Review of New South Wales Schools (1989), chaired by Sir John Carrick, emphasised six curricular initiatives: according importance to early childhood education; establishing six key learning areas; broadening electives in years 11 and 12; creating flexibility in student progression between levels; founding a new accreditation agency; and introducing a new Education Act. In a policy statement on curriculum reform, Metherell (1989) presented a set of goals for schools in New South Wales, and recommended introducing a core curriculum of six key learning areas for the primary level and eight key learning areas for the secondary level. The Education Reform Act of 1990 incorporated many of these reports' recommendations, which were to be implemented by 1995.

Established in June 1990, the New South Wales Board of Studies was given the responsibility for developing and approving syllabuses for kindergarten to year 12 in each key learning area. In March 1991, the Board of Studies distributed a discussion document to the educational community inviting comments on its proposals. Responses to this document were considered in framing advice issued to schools in July 1991 on curriculum and certificate requirements to take effect from 1992. This advice specified the implementation of two types of courses: courses developed for the Board



of Studies by syllabus committees and implemented after advice from key learning area coordinating committees; and courses developed by groups or individual schools, which were endorsed for a three-year period by one of ten regional endorsement panels, but more recently by a central approval panel. In 1991, syllabus committees began developing new syllabuses, incorporating outcomes statements and pointers, covering six, two-year stages from kindergarten to year 12, which were supported by teacher's guides, parent guides, and curriculum materials. In October 1993, Virginia Chadwick, the Minister for Education, Training and Youth Affairs, requested the Board of Studies to apply the national statements to develop the syllabuses, and incorporate the national profiles into the syllabuses. Following a review of the alignment between the outcomes and the national profiles, the Board of Studies agreed to maintain congruence, but also to modify the outcomes to provide the most appropriate courses for use in New South Wales schools. After presentation of the draft outcomes to teachers at consultative workshops held late in 1994, the Board of Studies decided to undertake a wider consultation early in 1995 by surveying teachers' opinions about their suitability. The report of this survey indicated that there was general support for including outcomes in the syllabuses, but that problems were identified in applying this approach, such as interpretation of the outcomes, consistency of the standards for the levels, outcomes and pointers, and their appropriateness to the learning area.

Following a state election in March 1995, the new Labor government announced in April that consultation on syllabus development, profiles and outcomes would be suspended pending the findings of a review. The Review of Outcomes and Profiles was initiated in May 1995 by the Minister for Education and Training, John Aquilina, for the purpose of investigating, consulting and reporting on three areas: the quality of curriculum documents that utilise outcomes and profiles; the appropriateness of arrangements for implementing outcomes and profiles; and recommendations for further action and review in these areas. An eight-member Review Panel, chaired by Professor Kenneth Eltis of the University of Sydney, was appointed, and supported in its work by an Educational Community Committee consisting of representatives drawn from academic, professional, teacher union, community and employer organisations. The Review Panel examined written submissions, visited a sample of schools, conducted public hearings, and met with officers



4

from the New South Wales Department of School Education, heard presentations from educational consultants, and met with the Educational Community Committee. The report of the Review of Outcomes and Profiles, published by the New South Wales Department of Training and Education Coordination (1995), was subsequently distributed to all schools in New South Wales.

The Review Panel presented 21 recommendations, which were implemented following advice from education agencies. Intended as a reference frame, these included four strategic recommendations: syllabuses containing expected learning outcomes should remain the means for presenting curriculum content; a framework for outcomes should be used to develop syllabuses; New South Wales should continue to contribute to national curriculum collaboration; and syllabuses and professional materials should be developed by the Board of Studies to support student equity. However, the Review Panel stated that the link between the national profiles and the syllabuses should be broken by replacing levels and pointers with outcomes based on the five stages covering kindergarten to year 10. This led to a recommendation that professional materials should be developed, which relate units of work and work samples to corresponding levels in the national profiles. The Review Panel recommended that syllabuses for kindergarten to year 6 should be implemented by employing a cycle commencing in 1997, and syllabuses for years 7 to 10 should be developed over realistic time frames. The report proposed that as earlier syllabuses were revised, outcomes should be derived for each stage. Until they were reviewed, those syllabuses, incorporating national strands and outcomes, should be used according to teachers' best judgments.

Following release of the report, the New South Wales Board of Studies (1996) published a position paper intended to establish an understanding of the place of outcomes in syllabuses. Important features of this paper were a rationale for including staged outcomes in syllabuses, criteria for developing outcomes, a model for developing syllabuses, and a set of guidelines for syllabus developers. Because of delay in completing work on the Mathematics syllabus, the Board of Studies published a revised schedule in November 1996, illustrated in Figure 1, for applying the syllabus model to develop the primary syllabuses. The syllabus model was also applied to develop syllabuses for years 7 to 10, which were approved and implemented over the same period.



5

FIGURE 1

SCHEDULE FOR SYLLABUS APPROVAL FOR YEARS K TO 6

Key Learning Area	1996	1997	1998	1999
English		B, D, F	С	
Mathematics	R.	S, C		
Science and Technology	L		E	
Human Society and Its Environment		B, D, S	F, C	
Personal Development, Health and Physical Education	U	S		С
Creative and Practical Arts	D		P, F	С

Key: U = Draft Syllabus in Use; L = Limited Evaluation of Existing Syllabus; E = Existing Syllabus Evaluation; R = Existing Syllabus Revision; B = Writing Brief Approval; D = New Syllabus Development; P = Pilot; F = Field Review; S = Support Material Development or Trial; C = Syllabus Completion.

However, the development of syllabuses for stage 6, covering years 11 and 12, was affected by the Review of the Higher School Certificate initiated in 1995 by John Acquilina to ensure that it met the needs of students, parents, and educators. Professor Barry McGaw, director of the Australian Council for Educational Research (ACER), who was appointed to develop a framework for public discussion on the Higher School Certificate, was assisted in identifying key issues and clarifying options by a 25-member Advisory Committee representing educational, business and civic groups. In the discussion paper, McGaw (1996) examined the developmental history of the Higher School Certificate as a means to identifying options for changes in three areas. Curriculum options focused on the extent of curriculum diversity and common learning, curriculum standards, and curriculum structure. Assessment and reporting options examined assessment methods, comparability of school-based assessments, interpretation and reporting in relation to the point of reference, presentation of results, and estimation of an overall score. Post-secondary selection options focused on selection based on Higher School Certificate results, the proportion of senior secondary results considered, selection based on generalised measures of performance, strategies for reducing pressure on students



by increasing flexibility at the point of transition and delaying selection for competitive programs. Following its release in May 1996, the discussion paper was disseminated to all New South Wales schools. A consultation process, involving 38 public meetings held in metropolitan and rural centres across the state, led to invitations for written submissions. Following conclusion of public consultation in August 1996, Professor McGaw and the Advisory Committee examined respondents' opinions concerning the options contained in more than 1,000 submissions, which were analysed with the assistance of a computer-based coding system.

In the report on the public hearings and submissions, McGaw (1997) presented 26 recommendations, each supported by a proposal and schedule for action, and organised under five aspects. The purpose of the curriculum at the senior secondary level was defined as the provision of intellectual, social and moral development within a flexible structure, including formal assessment and certification. Seventeen recommendations, relating to the curriculum, fell into six groups: reducing overlap between courses, applying criteria to develop and review courses, and abandoning the use of the key learning area structure; deleting, revising, or restructuring particular courses; abandoning distinction courses, replacing school-designed courses in areas of common interest with contentendorsed courses, and introducing a basic curriculum structure of two-unit courses consisting of advanced and less demanding units; applying principles for vocational education and training, and developing key competencies; requiring students to complete twelve units; and retaining the distinction between preliminary and final courses for the Higher School Certificate, and replacing the School Certificate with a Record of Achievement. Assessment and reporting were covered in six recommendations: evaluating Board-developed courses by cyclical reviews of syllabuses and external assessments, providing guidelines for school-based assessments, and reporting correlations between external and school-based assessments to schools; continuing statistical moderation of school-based assessment against external examinations; adopting a standards-referenced approach to assessment by developing achievement scales; reporting student results by numerical values; abandoning the use of categories in reporting; and providing school-based reporting of employmentrelated key competencies. Selection for post-secondary destinations should continue to be based on supplying universities with Higher School Certificate results on condition that an aggregate index



is used. To facilitate implementation of these recommendations between 1997 and 2000, the report recommended reducing the membership of the Board of Studies, which should reflect personal expertise rather than representation of interest groups.

Victoria

In September 1984, the Minister for Education, Robert Fordham, issued a paper, Curriculum Development and Planning in Victoria, later published in a collection of six key papers (Victoria, Minister for Education, 1985), which supported decentralising curriculum development to local school communities by proposing that the school curriculum be based in a framework with student outcomes being defined by school councils consisting of teachers, parents and community members. A three-phase Curriculum Frameworks Project, initiated in 1984 to support this policy, involved forming ten writing teams to develop an overview statement, and statements in each of nine learning areas, and then in 1985 disseminating a discussion paper for consultation. The second phase involved reviewing the results of the consultation, and publishing the ten statements during 1986. The third phase involved implementing the frameworks, which were published by the Victoria Ministry of Education (1988), and then adapting them to school contexts during 1987 and 1988. Several commentators, reporting on this development, found that a balance was attained between school-based management by school councils, and a statewide curriculum framework and assessment system (Watkins, 1991; Caldwell, 1994; Fuhrman and Johnson, 1994).

A growing emphasis on outcome-based education became apparent in Victoria during the 1990s with the publication of the *English Profiles Handbook* in 1991, and the release of the *Victorian Number and Space Profile* in 1992. This emphasis continued following the election of the conservative coalition government of the Liberal and National parties led by Premier Jeffrey Kennett, which initiated the reform program, Schools of the Future, reduced the size of the public school system, and increased accountability for schools by decentralising decision-making. This emphasis, however, did not lead to acceptance of the national statements and profiles, since the attitude of the newly appointed Minister for Education, Donald Hayward, became increasingly ambivalent



during 1993, following lobbying by academics from the University of Melbourne concerning the Mathematics profile. Following a meeting called in May 1993 to consider the academics' criticisms, Minister Hayward formed a seven-member Advisory Committee to review the Mathematics profile. Following public debate between the contesting groups, the Advisory Committee presented its final report to the Minister in June 1993, which made six recommendations about the Mathematics profile: it should not be adopted; it was unsuitable for making comparisons between different groups; it should be subjected to a nationwide review; a revised version may be suitable for reporting on student transfers between schools; a revised version may be suitable for reporting to parents; and the national review group should formulate a procedure to ensure that expert advice is obtained in future national projects in mathematics. By mid-1993, the Minister's scepticism had extended to the other seven learning areas, which led to a call for the other states and territories to participate in a review of the national statements and profiles (Graham, 1993).

In July 1993, the Minister requested the Victorian Board of Studies to review the extent to which the national statements and profiles provided an appropriate framework for the curriculum, and specify the processes and a schedule for any trials. The review involved consultations with the public, Catholic and independent sectors, subject associations, universities, the technical and further education level, principals' associations, and industry groups during September and October of 1993. On the basis of the consultation, the Board of Studies recommended that the eight key learning areas of the national statements and profiles provided an adequate basis for developing a new Curriculum and Standards Framework, but that those statements and profiles for Mathematics, Science, Languages other than English, and Study of Society and the Environment required adaptation, whilst those for the Arts, English, Technology, and Health and Physical Education needed little modification.

On accepting this advice in December 1993, the Minister requested the Board of Studies to develop a new Curriculum and Standards Framework. Eight key learning area committees, each supported by several working groups, were formed in November 1993 to develop curriculum statements based on the national statements and profiles, and specify guidelines for evaluating programs and



9 11

accrediting courses. After its preparation, the draft framework was submitted to the Board of Studies in June 1994, before being distributed for statewide consultation, including field reviews in a representative sample of schools. Following revision based on more than 5,000 responses received to a questionnaire administered during the consultation, the Curriculum and Standards Framework was approved by the Minister in November 1994, before being released at a public function held in Melbourne during February 1995 (Kimber, 1995).

The Curriculum and Standards Framework, published by the Victoria Board of Studies (1995), provides the basis for statewide curriculum planning and reporting of student achievement. Based on the nationally agreed key learning areas, the Curriculum and Standards Framework consists of component frameworks for the eight key learning areas. Each component is organised into strands, which provide the key features of the content and specify learning outcomes. Each component, except for Languages other than English, is also organised into seven levels, corresponding to year levels, which provide the basis for reporting student achievement, largely through outcome statements. Public schools in Victoria are required to use the Curriculum and Standards Framework to develop programs, but are not required to apply its structure to organise the curriculum.

The procedure, recommended for implementing the Curriculum and Standards Framework, involves following a sequence of seven steps: reviewing curriculum provision in the school; matching the components of current programs to the content coverage in the Curriculum and Standards Framework; establishing key learning area priorities; establishing school curriculum development priorities; designing strategies to address school curriculum priorities; planning programs; and designing plans for monitoring and evaluation. Whilst most public schools had completed the initial steps of this procedure in 1996, the effectiveness of the implementation process had not been evaluated. In June 1996, the Directorate of School Education required schools to use the Learning Assessment Project, a statewide standardised testing program introduced by the Victorian government in November 1994, to report student achievement against levels in the Curriculum and Standards Framework by the end of 1997.



The implementation of the Curriculum and Standards Framework is also supported by a variety of resources. The Board of Studies published a series of four documents under the title, *Using the CSF*, in 1995 and 1996, a series of seven general and key learning area advice booklets, and a guide for primary teachers to plan science programs. In collaboration with the Catholic and independent sectors, the Directorate of School Education developed Course Advice documents for each of the key learning areas and English as a Second Language, containing suggested learning activities, curriculum resources, and assessment techniques. In addition, two interactive multimedia CD-ROMs titled, *Understanding Australia*, which present information about Australia's history, geography, economy, politics, laws, and culture, were developed.

Queensland

Review of the school curriculum in Queensland featured as an issue in the 1992 state election. Following its election, the state Labor government led by Premier Wayne Goss appointed an independent curriculum review panel, chaired by Professor Kenneth Wiltshire of the University of Queensland, which spent 1993 visiting schools, reviewing public submissions, meeting with educational organisations and an expert reference group, and analysing documents on curriculum matters. The panel's report was submitted for public consultation from which 1,800 submissions were received and analysed. In the final report, the Review of Queensland School Curriculum (1994) presented a number of recommendations, including changes to structures for managing the curriculum, implementation of a core curriculum based on the national statements and profiles, and an emphasis on basic skills in literacy and numeracy, which were to be implemented over a six-year period. The report supported an intersystemic approach between public and private sectors for consultation, collaboration and implementation of the core curriculum.

The report, which endorsed the concept of a mandated core curriculum by adopting the eight learning areas of the national statements and profiles, proposed that new syllabuses for years 1 to 8 should be developed over the remainder of the 1990s. A common model was recommended for developing syllabuses by defining content processes and skills, specifying learning outcomes,



indicating teaching times, describing electives, presenting exemplary work programs, unbiased practices, and guidelines for best practices in years 1 to 8. Each syllabus would be supported by teacher's guides, containing suggested teaching approaches and learning experiences. In 1995, 88 coordinators were appointed and trained to support implementation of syllabuses for the eight key learning areas in each of the eleven regions. A Charter of Values, presenting goals for the school curriculum in Queensland, was also developed in 1995.

A system for reporting student achievement by Student Performance Standards was introduced progressively across the curriculum. In 1992, the Queensland Department of Education's Studies Directorate developed Student Performance Standards based on the national profiles, which were trialed in schools during 1993 for the English and Mathematics syllabuses. Although the Review of Queensland School Curriculum recommended that a Student Reporting Framework should be developed in each of the eight learning areas using a reduced number of items, it agreed that the Student Performance Standards could form a basis for this new framework. Implementation of Student Performance Standards was supported in 1995 by the appointment and training of 180 education advisors, consisting of equal numbers of mathematics and language arts specialists. The new National and Liberal state coalition government, elected in 1996, called for a review of the process for implementing Student Performance Standards, which led to a pilot study of the Queensland Levels of Student Performance in English and Mathematics during 1997, involving participating schools exploring a range of strategies for implementation, focusing on teacher workload, and assessment and reporting. A decision on implementation, planned for late 1997, will take into account the outcomes of the pilot study, and responses from teachers and parents.

The report recommended that measures to ensure quality assurance of the curriculum reform should be implemented to review the process of curriculum development, balance the provision of the curriculum in years 7 and 10, improve the standard of curriculum delivery, and ensure processes for assessment and reporting. The Quality Assurance and School Review Directorate was formed in 1995 with the appointment of 23 regionally based officers.



In order to implement the curriculum reform, the state government established the Queensland School Curriculum Council in 1995 to advise the Minister on curriculum development from preschool to year 12 through a strategic plan, and the Queensland School Curriculum Office to coordinate implementation and monitoring of the strategic plan for preschool to year 10, whilst the Board of Senior Secondary School Studies continued to be responsible for curriculum development in years 11 and 12. Salmon (1996) reported that the initial work of the Queensland School Curriculum Office encompassed three main areas: curriculum development; quality assurance; and strategic planning and resources involving scanning curriculum projects and products from elsewhere in Australia and overseas.

The key activity in curriculum development involved developing over a three-year period new syllabuses for years 1 to 8, and syllabuses for years 9 and 10 related to the key learning areas, employing the schedule illustrated in Figure 2, for the remaining six learning areas: Science; Studies of Society and the Environment; Arts; Health and Physical Education; Technology; and Languages other than English. At the commencement, a team of curriculum specialists and teachers is appointed to plan and develop a design brief for the new syllabus. Once the design brief has been completed, it is trialed in selected schools. At the same time, the development team and teachers in the trial schools develop the teacher's guide, as well as other appropriate professional materials, including application of information technology. Following revision of the design brief, the syllabus is piloted in selected schools before being implemented over a two-year period in schools across Queensland. To inform syllabus developers and school personnel, the Queensland School Curriculum Office developed a Curriculum Development Handbook, which documented these steps, and provided detailed advice about the procedures and structures used in the process.



FIGURE 2
SCHEDULE FOR SYLLABUS DEVELOPMENT FOR YEARS 1 TO 10

Key Learning Area	1996 1997 1998 1999 2000 2001
Science	B, D F, S P, C I
Studies of Society and the Environment	B, D F, S P, C I
Arts	B, D F, S P, C I
Health and Physical Education	B, D F, S P, C I
Technology	B, D F, S P, C I
Languages other than English	B, D F, S P, C I

Key: B = Design Brief Approval; D = New Syllabus Development; F = Field Review; S = Support Material Development or Trial; P = Pilot; C = Syllabus Completion; I = Syllabus Implementation.

South Australia

Following extensive consultations with teachers, parents, students, workers and community members, the South Australia Department of Education (1990) published a key policy document, which specified goals for schools in South Australia, nine essential skills and understandings and seven areas of study closely matching the eight national learning areas, guidelines for providing quality education in schools, and requirements for complying with this policy. Huppatz (1993) reported that a set of attainment levels, intended to report student achievement in the seven areas of study, was also developed and trialed in all public schools in South Australia during 1993. As a consequence of consultations arising from the results of these trials, the South Australia Department of Education, Employment and Training recommended in September 1993, that public schools in South Australia should transfer to implementing the national statements and profiles over a three-year period between 1994 and 1996.



Copies of the national statements and profiles were distributed to schools in 1994 for familiarisation. A range of services, including a Teaching and Learning Team, which provided training and professional development, and conferences on using student achievement information, were used to support school-based projects in assessment, reporting and transition between levels of schooling. These actions were accompanied by a review conducted during 1994 by a cross-divisional working group, which consulted teachers, curriculum officers, key educators, and professional associations, in order to develop a Curriculum Statements and Profiles Implementation Support Plan for phasing implementation of the national statements and profiles between 1995 and 1997. The plan identified five outcomes to be achieved in all schools over the three years through discussion of curriculum issues and action planning to develop programs, and procedures for assessment, recording and reporting. It also presented details for supporting schools with funding, developing curriculum materials, and providing training and professional development activities. Following distribution of the plan to schools early in 1995, the South Australia Department of Education and Children's Services announced that schools were required to report in four learning areas against the national profiles in 1996, an activity to be monitored and reviewed through a Statements and Profiles Implementation Evaluation Strategy developed in collaboration with the South Australia Quality Assurance Unit (Stehn and Smith, 1995).

The first two years of implementing the plan involved employing several strategies. The Teaching and Learning Team, consisting of fifteen curriculum specialists, offered seminars to groups of teachers from schools formed in districts on planning and programming, assessment, and reporting student achievement. These activities were coordinated with the work of the Materials Development Team, which assisted curriculum specialists develop specific curriculum materials to support the implementation process in each learning area, and English as a Second Language. In 1994, three school-based development projects involving 25 schools were initiated, which led to the development and publication of a professional material containing practical strategies for assessment, recording and reporting. In 1995, 30 schools conducted 22 projects relating to assessment and reporting practices for years 8 to 10, exchanging information on student achievement in the transition years of 7 and 8, integrating the learning areas in primary schools, and using student



achievement information. An additional project on planning the school curriculum for the reception year to year 10 was begun in 1996.

Furthermore, three research and development projects were initiated: the Quality Assessment Tasks Project developed sequenced sets of assessment activities forming collectively a quality assessment task, and tested them in selected schools in South Australia and Tasmania; a project team developed plain English descriptors for the profile outcomes, trialed them with 70 school and parent groups, and incorporated them into the profiles module on the South Australia Department of Education and Children's Services' electronic administrative information system; and groups of teachers from 24 schools investigated ways of assigning levels of achievement based on the national profiles.

In 1995, a survey of principals and teachers in 130 schools, conducted by ACER to evaluate the implementation of the national statements and profiles in South Australian schools, identified many positive aspects, but led to a change in scheduling the plan. A further survey, conducted late in 1996, was used to develop the details for implementing the plan during the final year in 1997.

Western Australia

Following a review of the state educational system by the Western Australia Government Functional Review Committee, the Western Australia Ministry of Education (1987) recommended reducing the activities of the central office to planning and quality control, forming 29 school districts to replace 13 regions, and implementing school development plans, which devolved decision-making authority to schools for determining funding grants, staff selection, facilities and curriculum resources. This report also supported implementing a unitised curriculum for years 8 to 10, recommended in the report of the Committee of Inquiry into Education in Western Australia (1984). The unit curriculum for years 8 to 10 offered pathways of study made up from short study courses spread over seven components, consisting of groups of subjects, which could be studied at six different levels of difficulty. Following piloting of the unit curriculum in seven schools in 1987, a



set of principles to guide school planning, additional consultants and support officers, a Unit Curriculum Clearing House to produce and disseminate professional materials, procedures for moderating unit curriculum assessments, and a professional development project were initiated in 1988 to improve implementation of the unit curriculum in schools between 1988 and 1990. After 1990, schools continued to use the unit curriculum in a context of school-based decision-making.

In 1990, the Western Australia Ministry of Education began developing Student Outcome Statements in eight learning areas, which closely matched the eight national profiles (McCreddin, 1993). The Student Outcome Statements were pre-trialed in two phases: the first in 1992 involved 120 schools exploring their use, and providing data to assess their validity and reliability in English and Mathematics; and the second in 1994 and 1995 examined their use in addressing issues of teaching, assessing student performance, and planning school development across different levels and types of schools. A wider review of Student Outcome Statements, involving schools from the public and private sectors, professional, employer and civic organisations, and institutions of higher education, was undertaken in 1993 to validate their suitability for local contexts in Western Australia. Working editions of Student Outcome Standards were disseminated to all schools in Western Australia in mid-1994. Formal trials were conducted in 88 schools across Western Australia in 1994 and 1995 to explore their use, and provide data for both working groups within the Curriculum Directorate and consultative groups drawn from the wider educational community (Randall and Kerr, 1995).

Following a recommendation by the Review of Education, Employment and Training (1993) that a curriculum agency should be established, the Minister for Education, Norman Moore, appointed a fourteen-member Committee of educators from the public and private sectors in June 1994 to review current processes for curriculum development, explore future options, and evaluate the financial implications and accountability of its recommendations. The review, consisting of a two-stage process, involved evaluating existing curriculum provisions and deriving a set of recommendations, and then preparing an organisational model and implementation plan. The first stage, which was accomplished by identifying organisations responsible for curriculum development, and surveying



key agencies and a sample of schools, indicated that most schools used centrally developed syllabuses and curriculum materials. The second stage led the Committee to establish a set of principles, which supported the development of a curriculum framework, consisting of an overarching statement, and statements for eight learning areas, curriculum guides and materials supporting the learning areas, and professional development to support implementation of the learning area statements. Published by the Western Australia Ministerial Committee to Review Curriculum Development (1995), the report recommended that a Curriculum Council should be formed to develop the curriculum framework, guides and materials for kindergarten to year 12.

An Interim Curriculum Council, formed in June 1996, was replaced in July 1997 by the thirteen-member Curriculum Council, which subsumed the functions of the Secondary Education Authority, the former accreditation agency. Responsible for developing and implementing the curriculum framework as well as accrediting student performance, the Curriculum Council proposed commencing its development in April 1997. Following statewide consultation on the curriculum framework over a three-month period beginning in July 1997, schools would develop their own plans for implementing the curriculum framework and Student Outcome Statements in 1998. Implementation, to commence in 1999, would be conducted over a five-year period.

Tasmania.

Prior to the publication of the national statements and profiles, the Tasmania Department of Education and the Arts (1993) published a policy statement presenting four key reference points for curriculum planning: requirements for a curriculum to which all students in Tasmanian schools are entitled; guidelines to assist schools plan a curriculum which attains student outcomes in personal, linguistic, rational, creative and kinaesthetic capabilities; standards for attaining each capability in each of the eight learning areas; and information establishing relationships between these elements. In 1994, statements on the Requirements for Balance in the Curriculum from Kindergarten to Year 12, and the Use of Curriculum Profiles in Tasmanian Schools and Colleges, intended to assist schools become familiar with the national statements and profiles, and



incorporate them through continuing reviews, were developed, distributed to teachers for consultation, revised and published. Copies of the national statements and profiles were distributed to public schools in 1994 for familiarisation. The Tasmania Department of Education and the Arts (1994) also published a professional material, which was used to provide inservice training in schools across Tasmania through a collaborative process involving the Educational Programs Branch and district offices. This document explained how schools could introduce the national statements and profiles through curriculum review and restructuring. It contained direction statements for each learning area, defining the learning area, describing its goals, scope and sequence, appropriate teaching and learning methods, and offering guidance for providing suitable content and adequate teaching time.

Guidelines for the learning areas were prepared and published during 1995 and 1996. Learning areas were identified as priorities, and a cycle for implementation, illustrated in Figure 3, was determined. Particular learning areas, which are given priority for a three-year period, receive specific support from curriculum specialists. Schools are required to review, develop and implement their educational programs according to this cycle.

Establishing priorities among particular learning areas led to the conduct of several projects. A perception that the national statements and profiles related more to the secondary level, led the Tasmania Department of Education and the Arts to collaborate with the Curriculum Corporation on the Primary Project, in which 52 units, using commonly presented topics in primary classrooms, were developed as an integrated one-year program, and published in three volumes by the Curriculum Corporation (1996).

Two projects on literacy and numeracy led to the development of professional materials, and sets of key intended outcomes, derived from the national profiles. The setting of learning outcomes in literacy, numeracy, information technology, vocational education and behaviour management, and the creation of systems to measure, monitor and report them, was incorporated as the most important of six Directions for Education, part of the state Liberal government's Directions



FIGURE 3
SCHEDULE FOR SUPPORTING IMPLEMENTATION

Key Learning Area	1997	1998	1999	2000
English	P	P		-
Mathematics				
Science				
Studies of Society and the Environment	P			
Arts	P	P	P	
Health and Physical Education		P	P	P
Technology				,
Languages other than English	P*	P*	P*	P*

Key: P = Priority area; $P^* = Priority$ area, subject to federal and state funding arrangement.

Evaluation of the implementation of the national statements and profiles in schools is undertaken by the Office of Educational Review, which conducted its first review in the learning areas of Technology, and Health and Physical Education in 1995. This review identified that some district offices were not implementing them according to priorities established in the cycle, and led to centrally imposed direction of curriculum priorities so that a uniform approach is maintained in schools.

In 1995, the Tasmania Department of Education and the Arts developed a policy requiring schools to report to parents annually on student achievement in literacy, numeracy, and each of the learning areas. The Tasmanian Secondary Assessment Board, which is responsible for accrediting syllabuses



for years 9 to 12, undertook a review during this period to align its syllabuses to the national profiles in terms of content, and consistent use of outcomes terminology.

Australian Capital Territory

In 1988, the Australian Capital Territory Department of Education and Training began developing curriculum frameworks for preschool to year 12 in eight learning areas, following initiation of a five-year plan for curriculum review and renewal (Hardy, 1990). Later, a decision was made to align the ACT Curriculum Frameworks with the national statements. The work of merging these frameworks was accomplished by working parties of teachers, followed by a system-wide consultative process, which was completed in December 1993. Each of the new ACT Curriculum Frameworks, published by the Australian Capital Territory Department of Education and Training (1994), consists of seven components: an introduction presenting contextual information; a description of the learning area; an outline of outcomes within the learning area; the scope of the learning area organised into five stages from preschool to year 12; advice on appropriate teaching and learning methods; a guide for program evaluation; and the learning area profile. Following their release in March 1994, schools were advised to use the ACT Curriculum Frameworks for developing curriculum relevant to their needs. In addition, ACT Course Frameworks, which provide the means for developing and accrediting any program within a designated subject area, and assessing and reporting student outcomes, were developed for years 11 and 12.

During 1994 and 1995, the national profiles were trialed in all public schools in the Australian Capital Territory to determine ways of using them by identifying constraints and solutions associated with their implementation, and to gather data about their quality. Although it was originally planned that the profiles would be implemented by 2000, the process was affected in March 1995 by the newly elected Liberal government requiring the English and Mathematics profiles to be implemented by 1997 for reporting literacy and numeracy standards (Kennedy, 1995; Richards, 1995). During 1995, the Liberal government initiated a plan for collecting data on literacy and numeracy to validate teachers' judgments about learning outcomes. The data were



collected for the first time in 1997 for literacy in years 3 and 5 by administering an achievement and diagnostic assessment instrument for language skills (Australian Council for Educational Research, 1994). These data, together with data to be collected for the first time in 1998 for the secondary level, will be used to determine resources and report to parents.

Northern Territory

In 1992, the Northern Territory Board of Studies completed a series of lengthy reviews covering the curriculum, assessment and certification procedures for schools in the Northern Territory. In 1993, the Northern Territory Department of Education implemented a Common Curriculum Statement, which organises the curriculum into a number of key learning areas covering the transition year to year 10, and a Common Assessment Framework, which incorporates both school-based assessment and system-wide testing. Cockshutt (1993) reported that the Northern Territory Department of Education examined ways of aligning the Common Curriculum Statement with the national statements, and its system-wide assessment program for years 5, 7 and 10 in urban schools, and for students aged 11 to 15 years in rural schools with the national profiles, and organised inservice training for teachers in profiling for monitoring student progress and reporting.

Jacob and Cockshutt (1995) reported that a pilot project was initiated in 1995 to trial the national profiles in English and Mathematics in a small sample of schools as a mechanism for monitoring and reporting student achievement. Each school formulated a profiling plan, which was monitored by centrally-based coordinators. Following the pilot project, the Board of Studies established a schedule for all schools to commence some profiling in 1998, and to profile all students in each of the eight learning areas by 2002. A major outcome of the pilot project was recognition of the need to reduce and simplify the national profiles into a more manageable Northern Territory profile, based on only one outcome for each level across each strand.



Conclusion

This review shows that most of the states and territories were involved in significant curriculum planning, when the national statements and profiles were referred by AEC to the state level in July 1993. Major educational reform in New South Wales, leading to the passage of the Education Reform Act in 1990, had as an important component the definition of a core curriculum, which has endured, since alignment to the national statements and profiles would require major redesign. Similarly, the unit curriculum, introduced in Western Australia as part of educational reform in 1987, contributed to delaying the formulation of a curriculum framework until 1995. In Victoria and the Australian Capital Territory, existing curriculum frameworks were more readily aligned to the national statements and profiles by revision. Important curriculum reviews, which recommended development of core curricula based on the national statements and profiles, were concluded during the process of national curriculum collaboration in the Northern Territory in 1992, or soon afterwards in Queensland in 1994. South Australia conducted a curriculum review in 1990, but decided in 1993 to adopt and implement the national statements and profiles in their existing form. Tasmania was the only state which failed to initiate a major curriculum reform, choosing instead to adopt and implement the national statements and profiles in their existing form.

It may be argued, therefore, that the nature of antecedent conditions, manifested in the features of curricula and assessment systems existing in the states and territories at the time the national statements and profiles were referred for review, forms an important contributing factor in explaining the direction that states and territories took subsequently in implementing them. This phenomenon, which needs to encompass consideration of the wider political, economic and social ramifications of educational reforms in the states and territories, may be illustrated by considering the response in New South Wales. Barcan (1996) concluded that educational reform, initiated by the Liberal government in New South Wales under the Minister for Education and Youth Affairs, Dr. Terry Metherell, in the late 1980s, was the most energetic among all the states and territories. The inhibition of curriculum reform, however, by protracted struggles for control between different interest groups in the early 1990s, led to inordinate delays in producing new syllabuses. Motivated



In 1995 by Premier Robert Carr's commitment to rigorous academic standards, the newly elected Labor government initiated the Review of Outcomes and Profiles, which required the Board of Studies to replace levels and pointers derived from the national profiles with outcomes based on the stages defined at the state level. The interpretation made by some commentators, that this recommendation represented rejection of the national statements and profiles, is likely to support a conclusion based on historical evidence that curriculum development in New South Wales was influenced more by preceding curriculum initiatives taken at the state level than by the outcomes of national curriculum collaboration.

It may be concluded that resistance to implementing the national statements and profiles was most formidable in those states, such as New South Wales and Western Australia, which had shown a strong commitment to reforming their curricula in ways which were later perceived by state-level policy-makers to be incompatible with the outcomes of national curriculum collaboration. Other states and territories, which could adapt existing curriculum frameworks or had not actively pursued curriculum reforms, found they could more easily accommodate implementation of the national statements and profiles. Whilst this explanation calls attention to the effects of various political, economic and social factors on curriculum reforms in the states and territories, it is apparent that the complex interaction of variables at the state level makes convincing interpretation more difficult than that faced by commentators addressing national curriculum issues. Whilst this phenomenon is not explained through elaborate theoretical interpretation, it provides the basis whereby investigators may be able to offer convincing interpretations following more extensive studies.



Acknowledgements

The author wishes to acknowledge the contributions made to reporting the implementation of the national statements and profiles in the states and territories by the following people: Lindsay Wasson of the New South Wales Department of School Education, Sam Weller and Jennifer Allum of the New South Wales Board of Studies; Ross Kimber, Catherine Herrick and Susan Dennett of the Victoria Directorate of School Education; Robin Sullivan, Brian Rout and Tony Cook of the Queensland Department of Education; Barry Salmon of the Queensland School Curriculum Office; Stephen Blight and Jim Dellit of the South Australia Department of Education and Children's Services; Robert McCreddin and Rose Moroz of the Education Department of Western Australia; Tim Doe of the Tasmania Department of Education, Community and Cultural Development; Dianne Kerr, Allan Hird and Alison Kidd of the Australian Capital Territory Department of Education and Training; and Nicholas Cockshutt of the Northern Territory Department of Education.



References

Australian Capital Territory Department of Education and Training (1994)

ACT Curriculum Frameworks

Canberra, ACT: Australian Capital Territory Department of Education and Training

Australian Council for Educational Research (1994)

Developmental Assessment Resource for Teachers

Camberwell, VIC: Australian Council for Educational Research

Barcan, A. (1996)

'Attempts to reform Australian state schools, 1979-1996'

Education Research and Perspectives, 23 (1), 1-45

Bartlett, L. (1992)

'National curriculum in Australia: an instrument of corporate federalism'

British Journal of Educational Studies, 40 (3), 218-238

Bartlett, L., Knight, J., Lingard, B. and Porter, P. (1994)

'Redefining a "national agenda" in education: the states fight back'

Australian Educational Researcher, 21 (2), 29-44

Caldwell, B. (1994)

'Australian perspectives on leadership: the principal's role in radical decentralisation in

Victoria's schools of the future'

Australian Educational Researcher, 21 (2), 45-62



Cockshutt, N. (1993)

'Statements and profiles in the Northern Territory'

Curriculum Perspectives, 13 (4), 13-14

Committee of Inquiry into Education in Western Australia (1984)

Education in Western Australia

Perth, WA: Committee of Inquiry into Education in Western Australia

Committee of Review of New South Wales Schools (1989)

Report of the Committee of Review of New South Wales Schools

Sydney, NSW: Committee of Review of New South Wales Schools

Curriculum Corporation (1996)

Integrated Units Collection

Carlton, VIC: Curriculum Corporation

Ellerton, N.F. and Clements, M.A. (1994)

The National Curriculum Debacle

West Perth, WA: Meridian Press

Fuhrman, S. and Johnson, S.M. (1994)

'Lessons from Victoria'

Phi Delta Kappan, 75 (10), 770-774

Graham, J. (1993)

'The Victorian dilemma'

Curriculum Perspectives, 14 (3), 26-28



Hardy, T. (1990)

'Curriculum frameworks in the ACT: a case of could, should or must?'

Curriculum Perspectives, 10 (4), 1-8

Huppatz, B. (1993)

'National statements and profiles: the South Australian position'

Curriculum Perspectives, 13 (4), 22-26

Jacob, S.E. and Cockshutt, N. (1995)

'Mainstreaming profiles for schools'

Curriculum Perspectives, 15 (3), 58-61

Kennedy, K.J. (1995)

The role of national statements and profiles in promoting systemic curriculum reform in the ACT

Curriculum Perspectives, 15 (3), 58-61

Kennedy, K.J., Marland, P., Sturman, A. and Forlin, C. (1996)

'Implementing national curriculum statements and profiles: corporate federalism in retreat?'

Forum of Education, 51 (2), 33-43

Kimber, R. (1995)

'Using a curriculum and standards framework'

Curriculum Perspectives, 15 (3), 72-74

Lingard, B., Porter, P., Bartlett, L. and Knight, J. (1995)

'Federal/state mediations in the Australian national education agenda: from the AEC to

MCEETYA, 1987-1993'

Australian Journal of Education, 39 (1), 41-66



McCreddin, R. (1993)

'The draft "student outcome statements" in Western Australia'

Curriculum Perspectives, 13 (4), 28-31

McGaw, B. (1996)

Their Future: Options for Reform of the Higher School Certificate

Sydney: NSW: New South Wales Department of Training and Education Coordination

McGaw, B. (1997)

Shaping Their Future: Recommendations for Reform of the Higher School Certificate

Sydney: NSW: New South Wales Department of Training and Education Coordination

McLean, K. and Wilson, B. (1995)

'The big picture'

Curriculum Perspectives, 15 (3), 56-58

Marsh, C.J. (1994)

Producing a National Curriculum: Plans and Paranoia

St Leonards, NSW: Allen and Unwin-

Metherell, T. (1989)

Excellence and Equity: New South Wales Curriculum Reform

Sydney, NSW: New South Wales Ministry of Education and Youth Affairs

New South Wales Board of Studies (1996)

Syllabus Model Using Staged Outcomes

McMahons Point, NSW: New South Wales Board of Studies



New South Wales Department of Training and Education Coordination (1995)

Focusing on Learning: Report of the Review of Outcomes and Profiles in New South Wales

Schooling

Sydney, NSW: New South Wales Department of Training and Education Coordination

New South Wales Education Portfolio (1989)

Schools Renewal: A Strategy to Revitalise Schools within the New South Wales State Education

System

Milsons Point, NSW: New South Wales Education Portfolio

Randall, R. and Kerr, D. (1995)

'Trialing student outcome statements'

Curriculum Perspectives, 15 (3), 74-76

Review of Education, Employment and Training (1993)

Review of Education and Training

Perth, WA: Review of Education, Employment and Training

Review of the Queensland School Curriculum (1994)

Shaping the Future

Brisbane, QLD: Queensland Department of Education

Richards, R. (1995)

'Curriculum reform and teacher's work'

In: Collins, C. (ed.)

Curriculum Stocktake: Evaluating School Curriculum Change

Deakin, ACT: Australian College of Education, 214-222



Salmon, B. (1996)

Syllabus Redevelopment in Queensland

Brisbane, QLD: Paper presented at the State Conference of the Queensland Society for Information

Technology in Education

South Australia Department of Education (1990)

Educating for the 21st Century: A Charter for Public Schooling in South Australia

Adelaide, SA: South Australia Department of Education

Stehn, J. and Smith, R. (1995)

'Review and reform using profiles'

Curriculum Perspectives, 15 (3), 66-69

Tasmania Department of Education and the Arts (1993)

Framework for Curriculum Provision, K-12

Hobart, TAS: Tasmania Department of Education and the Arts

Tasmania Department of Education and the Arts (1994)

Working with Statements and Profiles

Hobart, TAS: Tasmania Department of Education and the Arts

Victoria Board of Studies (1995)

Curriculum and Standards Framework

Carlton, VIC: Victoria Board of Studies

Victoria, Minister for Education (1985)

Ministerial Papers 1-6

Melbourne, VIC: Minister for Education



Victoria Ministry of Education (1988)

The School Curriculum and Organisation Framework: P-12. A Curriculum for All

Melbourne, VIC: Victoria Ministry of Education

Watkins, P. (1991)

'Devolving educational administration in Victoria: tensions in the role and selection of principals'

Journal of Educational Administration, 29 (1), 22-38

Western Australia Ministerial Committee to Review Curriculum Development (1995)

Review of School Curriculum Development Procedures and Processes in Western Australia

Perth, WA: Education Policy and Coordination Bureau

Western Australia Ministry of Education (1987)

Better Schools in Western Australia: A Programme for Improvement

East Perth, WA: Western Australia Ministry of Education





U.S. DEPARTMENT OF EDUCATION

OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT (OERI)

EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

REPRODUCTION RELEASE (Specific Document)

	ı.	DOCUMENT IDENTIFIC	CATION							
	National Americalum Colloboration. Who State of Meform									
		in the States and Territories Author(s): Michael G. Watt								
·		Author(s): MIC	hael G. Watt		+ho hier	vial conference of				
		Corporate Source (if	appropriate): Paper pre	sented a	t the ble	Publication Date:				
•		the Australian Curriculum Studies Association Fubication Date:								
	11.	1. REPRODUCTION RELEASE								
	In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche and paper copy (or microfiche only) and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document. If permission is granted to reproduce the identified document, please CHECK ONE of the options and sign the release below.									
		Delow.		_						
			"PERMISSION TO REPRODUCE TH MATERIAL HAS BEEN GRANTED E	IS OR	Microfiche	"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY				
CHECK	X	Microfiche (4" x 6" film)	IPERSONAL NAME OF ORGANIZATION.	_ "	(4" x 6" film)	IPERSONAL NAME OR ORGANIZATION.				
HERE 7	<u> </u>	and paper copy	Michael G Meat		reproduction only	AS APPROPRIATE				
		(8½" x 11")		-	Omy					
		reproduction	TO THE EDUCATIONAL RESOURCE INFORMATION CENTER (ERIC)."	ES		TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."				
	٠	Documents will be process	processed as indicated provided reproduct assed in both microfiche and paper copy.	ion quality permits.	If permission to repr	oduce is granted, but neither box is checked,				
SIGN HERE		indicated above. Reprepermission from the cagencies to satisfy information: Organization: Address: 316 Ch	reduction from the ERIC microfiche be copyright holder. Exception is made formation needs of educators in response to the company of the comp	y persons other ti for non-profit re	Position: Tel. No.: Oll	sion to reproduce this document as and its system contractors requires ofiche by libraries and other service. 11 chael G. Watt 61 3 6225 1335 May 1997				
	ļ	<u>Tasmania, A</u>	Australia zip Code: —	7005	Date:	May 1,997				
	·									
	111.	If permission to another source, p	please provide the following info	IC, <u>or,</u> if you wi	ng the availability le source can be s	he availability of the document from of the document. (ERIC will not an- specified. Contributors should also be ich cannot be made available through				
		Publisher/Distribut	tor:							
		Address:								
		Price Per Copy:			Quar	tity Price:				
	IV.		PYRIGHT/REPRODUCTION RIGHTS							
		If the right to gr name and address	rant reproduction release is held is:	by someone oth	er than the addre	ssee, please provide the appropriate				

